



**LOWER PASSAIC RIVER STUDY AREA
PRP DATA EXTRACTION FORM**

KLEER KAST, DIVISION OF PMC INC.

CURRENT MAILING ADDRESS/CONTACT INFO:

Philip E. Kamins, Chief Executive Officer
PMC, Inc.
12243 Branford Street
Sun Valley, CA 91352
(PCF000733 at Tab 124, PCF000735 at Tab 124)

FACILITY ADDRESS:

Kleer Kast, a Division of PMC Inc.
450 Schuyler Avenue
Kearny, NJ 07032
(the "Site")

Block 226, Lots 3, 4, and 11

(PCF000002 at Tab 1, PCF000065 at Tab 4, PCF000166 at Tab 11, PCF000219 at Tab 21,
PCF000779 at Tab 129, PCF000781 at Tab 130, PCF000783 at Tab 131, PCF000785 at Tab
132)

The facility also operated under the following names:

- Ampol Division of Kleer Kast Inc. (1985)
- King Finishing Inc., Division of PMC Inc. (1999)

(PCF000219 at Tab 21, PCF000787 at Tab 133)

FINANCIAL VIABILITY (annual revenue, # of employees):

Kleer Kast, Inc. ("Kleer Kast") was incorporated in New Jersey on September 10, 1971. The company was formerly known as K & M Plastics Corp. Kleer Kast utilized two fictitious names: (1) American Polymers, Inc., and (2) Ampol Division. (PCF000747 at Tab 125)

Kleer Kast had estimated sales ranging from \$1 million to \$4.9 million in 1999, while operating as King Finishing, Inc. (a division of PMC, Inc.). (PCF000787 at Tab 133)

PMC Inc. ("PMC") of Sun Valley, California, is the owner of the Kleer Kast Site in Kearny, NJ, and operates Kleer Kast as a division. PMC was founded in 1971 and incorporated in the State of Delaware on August 11, 1993. PMC's ultimate domestic parent is PMC Global, Inc., which

operates PMC as a subsidiary. As of 2003, PMC had a workforce of 3,000 employees and a net worth of \$110 Million. (PCF000202 at Tab 20, PCF000733 at Tab 124, PCF000735 at Tab 124, PCF000737 at Tab 124, PCF000741 at Tab 124, PCF000754 at Tab 126, PCF000772 at Tab 128)

DATES OF OPERATION (include info. on predecessors/successors if known):

Site operations commenced in 1971 and continue to the present. (PCF000069 at Tab 5, PCF000753 at Tab 126)

DESCRIPTION OF FACILITY OPERATIONS (list CERCLA hazardous substances used, manufactured or present):

The 19-acre Site is located at 450 Schuyler Avenue in Kearny, Hudson County, New Jersey. The Site is located in the northwestern section of the Town of Kearny and is bordered by a Conrail railroad right-of-way to the east. A large freshwater marsh known as "Kearny Meadows" is located farther east and on the opposite side of the Conrail railroad right-of way. The Site is bordered by Schuyler Avenue to the west and unrelated properties to its north. It is bordered by Quincy Place and other unrelated properties to its south. The area surrounding the Site consists of a mixture of industrial, commercial and residential developments. The Site is listed on the New Jersey State Priority List ("SPL") of contaminated sites. (PCF000219 at Tab 21, PCF000451 at Tab 60, PCF000624 at Tab 97)

The following annotated aerial photograph identifies the approximate location of the Klear Kast Site in Kearny, NJ:



**Klear Kast Site
450 Schuyler Avenue
Kearny, NJ 07032**

Aerial Photo Copyright Dated: 2007

Source: Google Earth (Sanborn/Europa Technologies/State of New Jersey/Tele Atlas)

Site boundary line locations as shown are approximations

(PCF000113A at Tab 6, PCF000220 at Tab 21)

From the late 1970s through at least 1999, operations at the Site centered around various processes involving the production of plastic products, specifically: clear and black plastic

sheeting for the graphic arts, stationery and packaging industries; cellulose acetate sheeting; acetate pellets; compounded and extruded cellulose; butyrate; propionate; acetate tool handles; and plasticized compounds. (PCF000070 at Tab 5, PCF000130 at Tab 8, PCF000142 at Tab 8, PCF000170 at Tab 14, PCF000186 at Tab 17, PCF000209 at Tab 20, PCF000433 at Tab 60, PCF000489 at Tab 72, PCF000779 at Tab 129, PCF000783 at Tab 131)

The facility operated continuously on a 24-hour per day basis, 7-days per week, all year and over time, had a workforce of between 30 and 60 employees. (PCF000002 at Tab 1, PCF000069 at Tab 5, PCF000128 at Tab 8, PCF000166 at Tab 11, PCF000170 at Tab 14, PCF000276 at Tab 39, PCF000489 at Tab 72)

In 1994 and 1995, raw, process and hazardous materials found onsite include the following:

- 1,1,1-Trichloroethane
- Acetone/acetone (recycled)
- Acetylene
- Activated carbon
- Alkylaryl phosphite
- Barium
- Butyric acid
- Cadmium
- Cellulose acetate
- Cellulose acetate butyrate
- Cellulose acetate butyrate flake
- Cellulose acetate flake
- Cellulose acetate propionate
- Cellulose acetate propionate flake
- Cellulose acetate yarn
- Chromium
- Colorants
- Copper
- Diethyl phthalate
- Diethylaminoethanol
- Dimethyl phthalate
- Di-n-butyl phthalate
- Di-tert-octyl diphenyl oxide
- Epichlorohydrin and Bis phenol A reaction products
- Ethyl cellulose
- Ethylene glycol
- Fuel oil number 6
- Hydrogen
- Mercury
- Morpholine
- Oil
- Phthalate plasticizers
- Propane
- Sodium hydroxide

- Sodium polyacrylate
- Triethyl phosphate
- Triphenyl phosphate
- Zinc stearate

(PCF000066-67 at Tab 4, PCF000130 at Tab 8, PCF000170 at Tab 14, PCF000333 at Tab 51, PCF000394-402 at Tab 54, PCF000433 at Tab 60)

In 1994, acetone, diethyl phthalate and dimethyl phthalate were stored in above ground tanks located at the Site. The company also reported that it stored pigments (containing chromium, cadmium and mercury) in drums located in the facility's pigment room. (PCF000066-67 at Tab 4)

Clear Plastic Film/Sheet Production:

In the late-1970s and early 1980s, plastic (cellulose acetate) and acetone were utilized as the raw materials in an extrusion process to produce clear plastic sheets. The acetone and cellulose acetate were routed to a "solvent band casting" process where the materials were mixed with a steam input to produce the finished plastic sheets. (PCF000171 at Tab 14, PCF000180 at Tab 16)

The spent acetone from the production of the clear plastic sheets was directed to a distillation process for recycling and reuse in continued production. First, spent excess steam and acetone were directed from the solvent band casting process into a carbon column which discharged the excess steam. The spent acetone was next directed into a condenser unit. The condenser discharged an acetone-water mixture comprised of 80% water and 20% acetone. The acetone-water mixture was directed into a distillation column which received an input of steam and produced recycled acetone for reuse in production at a 99% recovery rate. Non-contact cooling water from the condenser unit and wastewater from the distillation column were discharged to Frank's Creek, a tributary of the Passaic River. (PCF000171 at Tab 14, PCF000180 at Tab 16)

Black Plastic Film/sheet Production:

Black "ABS plastic pellets" were directed to a facility sheet extrusion machine to produce black plastic sheets. (PCF000171 at Tab 14)

Facility Wastewater Discharge to Frank's Creek:

The facility utilized water from wells and municipal sources for both cooling and process purposes. The spent cooling water was discharged to Frank's Creek and ultimately to the Passaic River. In the late 1970s and early 1980s, Kleer Kast discharged approximately 280,800 gallons per day of wastewater, including 10,000 gallons per day of contact water from the distillation column used for solvent recovery. (PCF000166 at Tab 11, PCF000171 at 14, PCF000187 at Tab 17, PCF000189 at Tab 17, PCF000194 at Tab 17, PCF000211 at Tab 20)

Prior to July 1986, the facility discharged all wastewater to Frank's Creek, a tributary of the Passaic River, via a single outfall, designated as DSN001. This wastewater discharge was routed to a ditch that flowed to Frank's Creek. The facility's discharge to Frank's Creek was

comprised of stormwater (roof and roadway runoff) as well as contact and non-contact cooling water.

(PCF000171 at Tab 14, PCF000187 at Tab 17, PCF000194 at Tab 17)

At various times, the facility's wastewater discharge to Frank's Creek contained the following hazardous substances:

- 2,4,6-Trichlorophenol
- Carboxylic acid (COOH)
- Chlorides
- Chloroethane
- Chromium
- Copper
- Diethyl phthalate
- Dimethyl phthalate
- Di-n-butyl phthalate
- Iron
- Lead
- Petroleum hydrocarbons
- Phenol
- Trichloroethylene
- Zinc

(PCF000171 at Tab 14, PCF000180-182 at Tab 16, PCF000308 at Tab 43, PCF000437-440 at Tab 60)

Facility Wastewater Discharge to Passaic Valley Sewerage Commissioners ("PVSC"):

Kleer Kast advised PVSC in April 1985 that it was planning to rebuild its wastewater discharge system to conform to NJDEP's requirements and that the company would be applying for a sewer connection permit. The permit request was filed in September 1985 in response to a civil action by the United States Environmental Protection Agency ("USEPA") against Kleer Kast for violation of the federal Clean Water Act for discharging contact cooling water to Frank's Creek. At that time, the facility had two sanitary sewer lines tied into the PVSC system and was requesting the tie-in of additional industrial lines into the PVSC system to eliminate the surface water discharge of contact water. On July 1, 1986, the company began discharging contact cooling water to the PVSC system rather than to surface water. (PCF000403 at Tab 55, PCF000428 at Tab 57, PCF000429 at Tab 58, PCF000458 at Tab 62, PCF000459 at Tab 63, PCF000461-462 at Tab 65)

By 1987, all process wastewater, contact cooling water and sanitary waste water was directed to the PVSC treatment plant. (PCF000209 at Tab 20) Sampling of the facility's wastewater discharge to the sewer system in 1988 and 1990, following the rebuild of Kleer Kast's wastewater discharge system, identified the following hazardous substances:

- Acetone
- Copper

- Iron
- Methylene chloride
- Zinc

(PCF000234 at Tab 26, PCF000236 at Tab 26, PCF000275 at Tab 38)

In 1991, Kleer Kast advised PVSC of the following hazardous substances that were present or may have been present, in excess of 15 kilograms per calendar month, in the facility's wastewater discharge to the PVSC system:

Hazardous Substance That Were Present In 1991 in the Kleer Kast Wastewater Discharge to PVSC	Hazardous Substance That May Have Been Present In 1991 in the Kleer Kast Wastewater Discharge to PVSC
1,1,1 Trichloroethane Acetone Diethyl phthalate	Barium Cadmium Chromium Dibutyl phthalate Dimethyl phthalate Lead Mercury Phenol Selenium

(PCF000295-307 at Tab 42)

In 1994 and 1995, the following hazardous substances were known or suspected to be present in the facility's wastewater discharge to the PVSC:

- 1,1,1 trichloroethane
- Cadmium, total
- Chromium, total
- Copper
- Diethyl phthalate
- Dimethyl phthalate
- Di-n-butyl phthalate
- Ethanolamine
- Lead, total
- Mercury, total
- Petroleum hydrocarbons
- Sudan 1 (solvent yellow 14)
- Total oil & grease
- Total organic carbon (TOC)
- Volatile solids
- Zinc, total

(PCF000133 at Tab 8, PCF000137-141 at Tab 8, PCF000339 at Tab 52)

Site Soil Sampling and Contamination:

In April 1993, four underground fuel oil storage tanks ("USTs") were excavated and removed from the Site. Sampling of the soils surrounding the USTs identified the following hazardous substances in Site soils:

- Fluoranthene
- Indeno(1,2,3-cd)pyrene
- Pyrene
- Benzo(a,h,i)perylene
- Total petroleum hydrocarbons

(PCF000624-627 at Tab 97)

PERMITS (provide dates):

NPDES:

NJPDES Permit # NJ0031313 for facility wastewater discharge to Frank's Creek, a tributary of the Passaic River was effective March 1, 1985 through February 28, 1992. The prior NPDES permit number NJ0031313 was effective October 1, 1984 with an expiration date of September 30, 1986.

(PCF000202 at Tab 20, PCF000406 at Tab 56)

PVSC (pretreatment):

PVSC Sewer Connection Permit for facility wastewater discharge to PVSC system Permit #15405032 was effective May 27, 1996 through May 24, 2001. The prior PVSC discharge/sewer connection permit was effective May 27, 1991 through May 27, 1996.

(PCF000017 at Tab 2, PCF000035 at Tab 3)

Other Permits:

Other permits issued to the Site include the following:

- NJDEP Air Permit # 107277 for "casting" operations
- NJDEP Air Permit # 093448 for "blending" operations
- NJDEP Air Permit # 105379 for compounding operations
- NJDEP Air Permits # 103729, 094719 and 094720 for acetone storage tanks
- NJDEP Air Permit # 094721 for "distillation" operations
- NJDEP Air Permit # 110863 for optical dust collector
- NJDEP Air Permit # 107276 for sheet extrusion operations
- NJDEP Air Permit # 099564 for boiler

NEXUS TO LOWER PASSAIC RIVER STUDY AREA (describe in detail; cite to supporting documentation; date or time period of disposal; list CERCLA hazardous substances; and volume, if known):

Direct (e.g. pipe, outfall, spill):

Online USEPA environmental records note Kleer Kast as having releases of dimethyl phthalate from the Site to surface water in the amount of 2 pounds per year in 1995. (PCF000768 at Tab 127)

During a June 9, 1994 facility inspection, NJDEP documented that an oil-like substance was leaking from the foundation of the loading dock area of Alexandria Plastics, a tenant at the Kleer Kast Site. The oil-like substance was observed discharging to the waters of the State. Kleer Kast was directed by NJDEP to determine the source of the oil-like substance, to immediately and permanently cease the unpermitted discharge and to submit a written report detailing the corrective actions taken by Kleer Kast. (PCF000328 at Tab 50) No further information has been obtained concerning the investigation and disposition, if any, of this unpermitted discharge.

On March 21, 1985, dye testing conducted at the Kleer Kast/Ampol facility documented that process overflows discharged to facility drains ultimately flowed to Frank's Creek. (PCF000494 at Tab 72, PCF000507 at Tab 73, PCF000517-518 at Tab 76, PCF000520-521 at Tab 76) The dye test was performed on a drain that received the water from the quench baths; these baths were sampled in December 1984 and the following hazardous substances were detected:

- Copper
- Dimethyl phthalate
- Diethyl phthalate
- Lead
- Methylene chloride
- Trichloroethylene

(PCF000507-510 at Tab 74)

As noted above, the Site discharged both non-contact cooling water as well as process water from the distillation column to Frank's Creek, a tributary of the Passaic River. Wastewater discharged to the Creek contained, at various times, the following hazardous substances:

- 2,4,6-Trichlorophenol
- Carboxylic acid (COOH)
- Chlorides
- Chloroethane
- Chromium
- Copper
- Diethyl phthalate
- Dimethyl phthalate
- Di-n-butyl phthalate
- Iron

- Lead
- Petroleum hydrocarbons
- Phenol
- Trichloroethylene
- Zinc

(PCF000171 at Tab 14, PCF000180-182 at Tab 16, PCF000308 at Tab 43, PCF000437-440 at Tab 60)

These hazardous substances would have been present in the facility's discharges to Frank's Creek for the 14 years they discharged to surface water without a permit, and during any permit violations noted below.

- Based on a January 28, 1982, facility inspection, NJDEP cited Kleer Kast for excessive amounts of total organic carbon ("TOC") in its wastewater discharge. Sampling indicated TOC levels of 0.39 ppm. (PCF000160 at Tab 9, PCF000197 at Tab 18, PCF000200 at Tab 19)
- In July 1987 the facility was out of compliance for high levels of TOC in its discharge. Kleer Kast stated that the TOC exceedences were due to high levels of inorganic carbon in the water withdrawn from its onsite production wells. (PCF000228 at Tab 23)
- In August 1987 a spill occurred at the Site at the operations of RoseArt, a tenant of Kleer Kast. The RoseArt spill occurred prior to August 14, 1987, and had not been cleaned-up as of August 18, 1987. No further information was provided as to the extent and size of the spill. The spill consisted of mineral oil, which was carried into the facility's NPDES discharge via stormwater runoff to storm drains due to heavy rains. This discharge resulted in non-compliance for TOC during NPDES permit required monthly monitoring in August 1987. (PCF000230 at Tab 24, PCF000232 at Tab 25)
- Kleer Kast exceeded total suspended solids ("TSS") effluent limitations in violation of its NPDES permit during August 1987 and in May and July 1988. In a Notice of Violation ("NOV") issued by NJDEP, Kleer Kast was cited for having an unpermitted source of wastewater originating from storm water runoff, that was routed into the facility's NPDES DSN001 outfall to Frank's Creek. (PCF000238 at Tab 27, PCF000241 at Tab 28, PCF000244 at Tab 29, PCF000247-248 at Tab 30)
- On August 1, 1989, NJDEP conducted a facility evaluation inspection of the Kleer Kast facility. Based upon the findings of the inspection, the agency issued a Notice of Violation to Kleer Kast on October 6, 1989. An unpermitted discharge of non-contact cooling water from injection molding machines was observed by NJDEP in facility Building # 5. NJDEP also reported that floatables, including plastic pellets, were observed in the effluent of DSN001. (PCF000259 at Tab 33, PCF000261 at Tab 34)
- An October 23, 1990 facility inspection by NJDEP identified non-compliance for TOC. Kleer Kast subsequently advised that a preliminary investigation supported high TOC concentrations in the on-site well water utilized in the facility operations. (PCF000291 at Tab 40, PCF000293 at Tab 41)

- NPDES sampling conducted at the Kleer Kast facility for the period ending November 30, 1993, indicated that the facility was out of compliance for temperature. (PCF000316-317 at Tab 48)
- On January 17, 1995, NJDEP advised Kleer Kast that an October 26, 1994 facility inspection documented violations by Kleer Kast for TSS. (PCF000340 at Tab 53)

Sanitary Sewer (provide name and location of CSO; details regarding CSO overflows and dates:

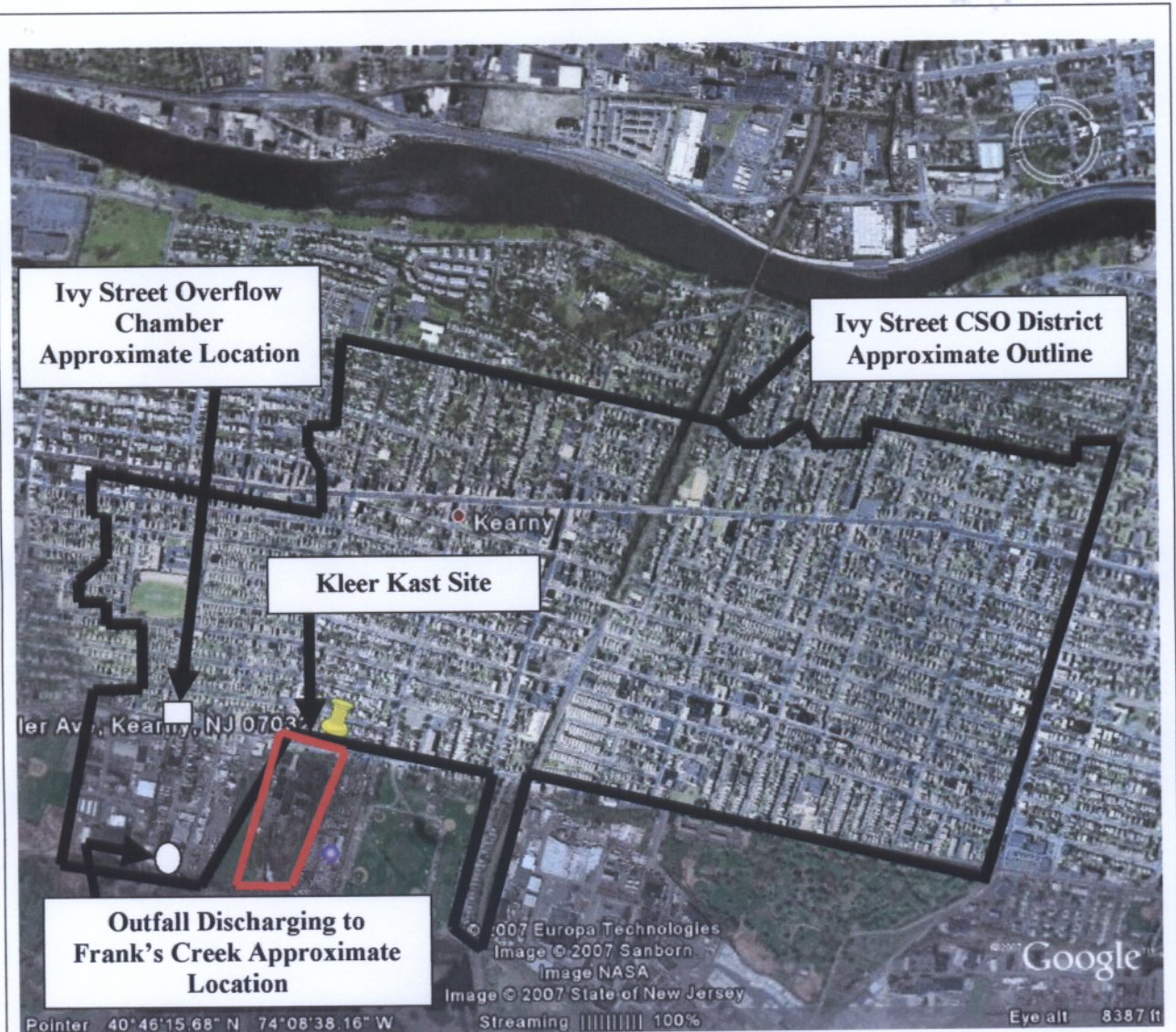
All dischargers into “navigable waters” of the United States were required under the Federal Water Pollution Control Act Amendments of 1972 to apply for an NPDES permit from the USEPA. PVSC received its NPDES Permit, effective February 28, 1975. (KLL004868 at Tab 135, KLL006250 at Tab 134)

As of April 8, 1976, PVSC adopted its “Rules and Regulations of the PVSC Concerning Sewer Connection Permits” and provided them as of April 12, 1976, to each “user municipality” in the PVSC system for their adoption and use. (KLL005050-51 at Tab 136)

The 1975 NPDES Permit for PVSC included the combined sewer outfall located at Ivy Street in Kearny, NJ, as one of the “permitted” discharge point to the Passaic River. (KLL006264 at Tab 134)

The facility is located in the Ivy Street CSO district.

The following annotated aerial photograph identifies the approximate location of the Klear Kast Site within the Ivy Street CSO District.



Liquid Cargo Site and Ivy Street CSO District Kearny, NJ

Aerial Photograph Copyright: 2007

Photo Source: Google Earth (Europa Technologies/Sanborn/NASA/State of New Jersey)

Site boundary line locations as shown are approximations

(KLL016812 at Tab 137)

The 1976 PVSC Overflow Analysis report states that overflows from the Ivy Street CSO District and outfall occur during periods of rainfall. (KLL016813 at Tab 137)

By 1987, all process wastewater, contact cooling waters and sanitary wastewater generated at the Site was being directed to the PVSC treatment plant. (PCF000209 at Tab 20)

December 7, 2007

As discussed above, sampling from 1988 to 1995 identified the following hazardous substances as present or suspected in Kleer Kast's wastewater discharged to the PVSC:

- 1,1,1-Trichloroethane
- Acetone
- Barium
- Cadmium
- Chromium
- Copper
- Diethyl phthalate
- Dimethyl phthalate
- Dibutyl phthalate
- Ethanolamine
- Iron
- Lead
- Mercury
- Methylene chloride
- Petroleum hydrocarbons
- Phenol
- Selenium
- Sudan 1 (solvent yellow 14)
- Total oil & grease
- Total organic carbon
- Volatile solids
- Zinc

(PCF000133 at Tab 8, PCF000137-141 at Tab 8, PCF000234 at Tab 26, PCF000275 at Tab 38, PCF000296-307 at Tab 42, PCF000309 at Tab 44, PCF000312 at Tab 45, PCF000320-321 at Tab 49, PCF000323-324 at Tab 49, PCF000326-327 at Tab 49, PCF000339 at Tab 52, PCF000437-440 at Tab 60)

The following NOVs and/or reports of non-compliance with wastewater discharge permits have been issued to Kleer Kast based upon historical exceedences of certain hazardous substances detected in the facility's wastewater discharge to the PVSC system:

- On March 6, 1990, Kleer Kast reported to PVSC that approximately 50 gallons of Number 6 fuel oil were discharged to the sewer during a 1-hour period. The discharge resulted from a leak in a fuel oil recirculating line. PVSC issued a Notice of Violation to Kleer Kast on March 7, 1990 for the discharge. (PCF000265 at Tab 36, PCF000266 at Tab 37)
- On April 30, 1993, Kleer Kast advised PVSC that 100-gallons of a mixture of rainwater and diethyl phthalate, which had accumulated in the facility tank farm, was discharged to the sewer without PVSC approval. (PCF000315 at Tab 47)

Storm Sewer:

No information is available at this time.

Runoff:

No information is available at this time.

Groundwater:

No information is available at this time.

POTENTIAL NEXUS TO LOWER PASSAIC RIVER STUDY AREA (describe in detail; cite to supporting documentation; list CERCLA hazardous substances; and volume, if known):

Direct (e.g. pipe, outfall, spill):

See above discussion for documented discharges of hazardous substances from this facility to Frank's Creek a tributary of the Passaic River.

Sanitary Sewer (provide name and location of CSO; details regarding CSO overflows and dates):

See above discussion for documented discharges to the combined sewer system.

Storm Sewer (provide name and location of CSO; details regarding CSO overflows and dates):

During a facility inspection conducted on August 1, 1989, NJDEP reportedly observed the following:

- Area around the facility loading dock was littered with pellets and other solids that were being discharged to the facility storm sewer;
- Storm sewer located in front of facility Building # 7 was observed to have pellets and solid materials being flushed into the drain due to poor housekeeping;
- Storm sewer along the side of Building # 7 was reportedly a potential source for solid materials to enter the storm system;
- A pit along the building rented by Alexandria Plastics, a Kleer Kast tenant, has solids and pellets entering the system;
- A hose was observed to be discharging into the pit in the Alexandria Plastics building;
- Poor and unsatisfactory housekeeping practices in the manufacturing areas and plant grounds did not control floatables and solids from entering the facility discharge; and
- The facility discharge pit J9 was observed to have floatables and solid waste in the pit.

(PCF000600-601 at Tab 90)

Runoff:

On December 22, 1992, Klear Kast advised NJDEP that the Kearny facility was undergoing an emergency shutdown in place as of December 12, 1992. The shutdown was reportedly due to water damage caused to the plant by a storm on December 12th. Klear Kast advised that it anticipated resuming production at the Kearny plant on or about January 4, 1993. If, during this storm event, the plant Site was flooded, there was the potential for contaminated runoff from inside or outside of the plant to have entered the drainage pit or ditch to Frank's Creek. (PCF000314 at Tab 46)

Online USEPA environmental records note Klear Kast as having airborne releases of dimethyl phthalate from the Kearny facility. It was noted that the amount of the released dimethyl phthalate ranged from 1 to 99 pounds per year for the reported year of 1995. (PCF000768 at Tab 127) The potential exists that the release of dimethyl phthalate to air served as a mechanism to allow for its deposition to ground and for its subsequent run-off to surface water adjacent to the Site.

In April 1993, USTs formerly utilized in the operations at the Klear Kast Site were excavated and removed from the Site. Sampling of the soils surrounding the USTs identified the presence of the following hazardous substances as contaminants in the Site soils:

- Fluoranthene
- Pyrene
- Benzo(a,h,i)perylene
- Total petroleum hydrocarbons

(PCF000624 at Tab 98, PCF000625-627 at Tab 98)

The potential exists that hazardous substances found as contaminants in Site soils discharged to surface waters and or storm sewers and thence to Frank's Creek, a tributary of the Passaic River.

Groundwater:

No information is available at this time.